

genera can hardly be merged with their supposed relatives until we know more about what a genus really is, and how it is constituted. *Triodanis*, in my opinion, is as well founded as the average genus in its family, and should be maintained unless we are to have a very severe general reduction in the number of genera recognized in the *Campanulaceae*.

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A NOVA SCOTIAN DWARF SHADBUSH

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AMELANCHIER **lucida** (Fernald), stat. nov. *A. stolonifera* Wiegand, var. *lucida* Fernald in RHODORA, xxiii. 267 (1921).

When this shrub of sandy or peaty barrens and gravels of Nova Scotia was described I placed it with *A. stolonifera* Wiegand, not then fully understanding how constant (except in hybrids) is the presence of dense tomentum on the summit of the ovary, this character practically invariable in the following stoloniferous or surculose species in eastern North America: *A. alnifolia* Nutt., *A. humilis* Wiegand, *A. mucronata* Nielsen, *A. gaspensis* (Wiegand) Fernald & Weatherby, *A. stolonifera* Wiegand and *A. Fernaldii* Wiegand. When the lustrous-leaved shrub of Nova Scotia was discovered by Long and me I wrote:

one of the neatest little shad bushes we ever saw, a beautiful shrub with stoloniferous habit, low stature (3–6 dm.) and nearly orbicular dark-green, highly lustrous leaves. Afterward, at Grand Lake, Halifax County, at Springhill Junction in Colchester County, at Middleton in Annapolis County and at various places westward we found it a thoroughly distinct and dominant shrub of barrens, either dry or wet. In habit it resembles *A. stolonifera* Wiegand,¹ a characteristic shrub from Maine to Virginia and in eastern Newfoundland, with dull and pale-green or glaucous foliage and with the summit of the ovary densely tomentose; but this characteristic Nova Scotian shrub with dark, glossy leaves has the summit of the ovary wholly glabrous, though it is sometimes arachnoid or sparsely pubescent. Typical *A. stolonifera* we found in Nova Scotia, though only once; but the common shrub is so well marked that it should be separated as a variety.—Fernald, l. c. 130 (1921).

The dark green and lustrous coriaceous leaves are so unlike those of *Amelanchier stolonifera* that the shrub can not properly

¹ Wiegand in RHODORA, xiv. 144 (1912).

be treated as belonging to that species, and the glabrous summit of the ovary is all wrong. Furthermore, the terminal overwintering buds of *A. stolonifera* are reddish-brown and only 6 or 7 mm. long. We have no fully developed terminal buds of *A. lucida*, but a vigorous shoot, collected on September 8, shows a slenderly lance-acuminate yellowish bud essentially 1 cm. long. Autumnal material, most kindly secured for me at the type-locality by Professor Horace G. Perry, has the new leaves already pushing out after a very warm September. So far as the bud-scales show they are like those just noted. Neither do we know the flowers of *A. lucida*, but the fruit, of which we have an abundance, is scarcely that of *A. stolonifera*. In the latter the mature pedicels are pubescent, the mature hypanthium 3–4 mm. in diameter, the mature sepals recurved. In *A. lucida* the pedicels are glabrous, the mature hypanthium 5–7 mm. in diameter, the sepals erect.

Only two low and strongly stoloniferous species of the genus are recognized in eastern North America, in which the summit of the ovary is glabrous. One is the characteristic little *Amelanchier obovalis* (Michx.) Ashe, which was discussed and illustrated in RHODORA, xliii. 566, pl. 672, fig. 3 (1941), a colonial species of pinelands from Georgia and Alabama north to eastern Maryland, southeastern Pennsylvania and southern New Jersey (and at the eastern edge of the Alleghenies in Virginia). Here is the real relationship of *A. lucida*. From *A. obovalis* the latter differs in the pale (instead of reddish-brown) terminal overwintering buds; its coriaceous, dark green and lustrous (instead of membranaceous, pale green and opaque) leaves; its fruiting raceme with glabrous (instead of pubescent) rachis and pedicels; the longer pedicels 1–2.5 cm. (instead of 3–12 mm.) long; hypanthium 5–7 (instead of 2–3) mm. in diameter; the fruit obviously longer.

The other species, found on a remnant of the Atlantic Coastal Plain midway between the northern limit of *Amelanchier obovalis* and the Nova Scotian area of *A. lucida*, is the endemic *A. nantucketensis* Bicknell in Bull. Torr. Bot. Cl. xxxviii. 453 (1911), a species which in its morphological characters is midway between *A. obovalis* and *A. lucida*. In outline and texture of mature leaves and diameter of hypanthium it is similar to *A. obovalis* but the expanding leaves are glabrous or promptly

glabrate (instead of heavily white-tomentose) beneath; the mature leaves sublustrous above (instead of dull); racemes lax and 2–4.5 cm. long, with glabrous or promptly glabrate rachis and pedicels, the longer pedicels 1–2 cm. long (in *A. obovalis* the rather dense racemes 1–3 cm. long, the flowering pedicels white-tomentose, the fruiting ones pilose, the longer ones 3–12 mm. long); sepals 2–4 mm. long, soon recurving (in *A. obovalis* 1–2 mm. long, erect or tardily spreading); petals linear-oblongate, frequently involute (in *A. obovalis* narrowly elliptical and flat).

From *Amelanchier nantucketensis* the Nova Scotian *A. lucida* differs in its coriaceous and highly lustrous oblong, broadly elliptic or subrotund (instead of membranaceous and less lustrous elliptic-oblong to oblong-obovate) leaves 1.5–6.5 cm. long and 1–4 cm. broad (instead of only 2–3 cm. long and 1.5–2 cm. broad); sepals remaining erect (instead of recurving); hypanthium 5–7 mm. (instead of 4–5 mm.) in diameter.

Although in his monograph of *Amelanchier* Dr. G. N. Jones treated *A. nantucketensis* as the nonstoloniferous fastigate tall shrub or tree, *A. canadensis*, and *A. lucida* as one of the many shrubs under the inclusive *A. spicata* sensu G. N. Jones, not K. Koch, the glabrous summit of the ovary clearly shows that *A. lucida* does not belong in that miscellaneous complex with the summit of the ovary tomentose. The permanently attached identification-labels on the Gray Herbarium sheets of the dwarf and stoloniferous *A. obovalis*, with the identifications marked as *A. canadensis*, indicate that in case of *A. obovalis*, maintained in his publication by Dr. Jones, there must have been an error in so misidentifying a large number of sheets.

As here interpreted, the three dwarf and stoloniferous colonial species with glabrous summits of ovaries make up a series of chiefly Coastal Plain dispersal: *A. obovalis* following the Coastal Plain (but rarely found inland) from Alabama and Georgia to eastern Maryland, southeastern Pennsylvania and southern New Jersey; *A. nantucketensis* isolated on Nantucket, more than 250 miles to the northeast; *A. lucida* endemic in Nova Scotia, another 250 miles farther to the northeast. This disruption of range suggests derivation in the North off the now submerged continental shelf, a derivation evident in many scores of other cases.